

REMARKS

The Examiner's communication mailed September 24, 2004 has been received and carefully considered. In conformance with the applicable statutory requirements, this paper constitutes a complete reply and/or a bona fide attempt to advance the application to final action. Specifically, claims 1, 13, 16-18, and 20-24 have been amended and claim 25 has been withdrawn. In addition, detailed arguments in support of patentability are presented. Reexamination and/or reconsideration of the application as amended are respectfully requested.

Summary of the Office Action

Claims 13 and 23-24 stand rejected under 35 U.S.C. § 112, second paragraph.

Claims 1 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kokaji et al. (U.S. Patent No. 4,268,872).

Claims 1 and 6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by McBride (U.S. Patent No. 3,756,760).

Claims 2-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kokaji et al.

Claims 7-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McBride in view of Kokaji et al..

Claims 1-5, 9-18 and 22-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ullman (U.S. Patent No. 3,392,896) in view of Kokaji et al.

Claims 6-8 and 19-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ullman in view of McBride and Kokaji et al.

Restriction Requirement

The Examiner restricted the examination of the present application under 35 U.S.C. § 121 to one of the following groups of inventions:

I. Claims 1-24, drawn to a drive roller or a drive roller feeding system, classified in class 226, subclass 190.

II. Claim 25, drawn to a method of making a drive roller, classified in class 427, subclass 523.

As the Examiner indicated, a provisional election was made without traverse to prosecute the invention of Group I, which includes claims 1-24. Applicant hereby affirms the election of Group I.

Applicant retains the right to continue prosecution of the unelected claim, i.e., claim 25, in one or more continuation or divisional applications.

35 U.S.C. § 112

Claims 13 and 23-24 have been carefully amended to resolve the 35 U.S.C. § 112 rejection.

Over the Reference(s) of Record
The Claims Distinguish Patentably

Claim 13 calls for a wire feeding mechanism to include a drive roller with one of a plating and a coating on an outer surface thereof. The Examiner asserts that it would have been obvious to one of ordinary skill in the art to provide the outer surface of drive rollers 6,8 of Ullman with a hardness plating or coating, especially in view of the teaching of Kokaji et al. disclosing that a hardness coating on the outer surface of a drive roller would prevent damage to and prolong the life of the roller. Applicant respectfully disagrees.

First, Ullman and Kokaji et al. are directed toward nonanalogous art. Ullman relates to feeding devices for feeding two wires at a time along parallel paths (Col. 1, lines 7-8). Kokaji et al. is directed toward a magnetic duplicator which, using Xerography methods, is said to automatically and quickly obtain numerous copies from a single original copy (Col. 1, lines 6-10). Undoubtedly, these fields of endeavor are entirely distinct and not likely to be cross-referenced by applicants or those skilled in the art practicing in one or the other.

The MPEP is instructive on this issue. Section 2141.01(a) states that “[i]n order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” *Citing In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992). As already stated, no rational basis exists for claiming that both references are within the field of applicant’s endeavor. Applicant’s disclosure makes clear that the invention of claim 13 relates to the art of wire feeding mechanisms and, more particularly, to drive rollers used in wire feeding mechanisms for driveably advancing a welding wire (Application at page 1, lines 2-4). Magnetic duplicators employing Xerography methods are about as far from Applicant’s field of endeavor as possible.

Further, it cannot be fairly said that Kokaji et al. is reasonably pertinent to the particular problem faced by Applicant. Kokaji et al. is concerned with applying the methods of latent image formation and development to a duplicator to automatically produce numerous copies from one document (Col. 1, lines 48-52). Applicant's invention of claim 13 is concerned with preventing the premature wearing of wire feeder drive rollers. Thus, it cannot fairly be said that Kokaji et al. is reasonably pertinent to the particular problem that faced Applicant.

Second, one skilled in the art would not look toward Xerographic duplicators or copiers to improve wearability of wire feeder drive rollers. In other words, one skilled in the art would not be motivated to combine Kokaji et al. with Ullman. More particularly, with reference to Figure 2 of Kokaji et al., record paper 25 (presumably, a sheet of paper from a stack of sheets) is directed through the duplicator by a series of rollers. The sheet 25 passes between transfer roller 33 and transfer drum 21 whereby a toner image is imparted onto the sheet 25. Continuing, the sheet 25 is passed between fixing rollers 41,42 whereby the imparted toner image is "fixed" onto the sheet 25. Fixing relates to the process of permanently bonding the toner image onto the sheet 25 so it will not be prone to smudging.

While Kokaji et al. does disclose a fixing roller formed of alloy steel, having a hardened surface and plated with hard chromium, it is inconceivable that an inventor would look to the printer/copier arts to improve the drive rollers of a wire feeder. The rollers 41,42 of Kokaji et al. move a sheet of paper along a path and are not subjected to near the same loads as wire feeder drive rollers which move an aluminum or steel wire along a path. Moreover, Kokaji et al. fails to acknowledge any problem with premature failure of its drive rollers 41,42 (let alone driver rollers moving an aluminum or steel wire). Thus, stated succinctly, no one seeking to improve the wear resistance of wire feeder drive rollers would look to the printer/copier technologies.

Accordingly, it is submitted that claim 13 and claim 14 dependent therefrom are in condition for allowance.

Claim 12 calls for a plating to be on an outer surface of a drive roller hub for use in a wire feeding mechanism. The plating tangentially and compressively contacts an associated continuous length of wire to advance said wire through the wire feeding mechanism. Like claim 13, claim 12 is rejected on the combination of Ullman and Kokaji et al. For at least the reasons discussed at length above (concerning the

improper combination of Ullman and Kokaji et al.), Applicant asserts that claim 12 and claims 15-24 dependent therefrom are in condition for allowance.

Claim 1, as amended, calls for a hub rotatably received on a wire feeding mechanism to have a plating on an outer surface thereof. It is respectfully submitted that none of the references of record fairly disclose or suggest such an arrangement. For at least this reason, it is submitted that claim 1 and claims 2-12 dependent therefrom are in condition for allowance.

CONCLUSION

All formal and informal matters having been addressed, it is respectfully submitted that this application is in condition for allowance. It is believed that the claim changes clearly place the application in condition for allowance. Alternatively, if the Examiner is of the view that the amendments do not place the application in clear condition for allowance, it is requested that he telephone the undersigned for purposes of conducting a telephone interview to resolve any outstanding differences. In any case, an early notice of allowance is earnestly solicited.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & MCKEE, LLP

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Date


 Robert V. Vickers, Reg. No. 19,504
 Erik J. Overberger, Reg. No. 48,556
 1100 Superior Avenue
 7th Floor
 Cleveland, Ohio 44114-2579
 (216) 861-5582

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December 2, 2004	Audrey M. Dragony